

Louisiana Office of Public Health Laboratories	
Test Name	Human Immunodeficiency Virus HIV-1 Western Blot
PHL Location	Office of Public Health Laboratory Baton Rouge
CPT Code	86689
Synonyms	Serum Western Blot, HIV
Brief Description of Test	<p>The HIV-1 Western Blot is used to detect virus specific antibodies to HIV-1 in human serum or plasma. It is intended for use as an additional, more specific test for specimens that are used as an aid in the diagnosis of infection with HIV-1 and/or HIV-2.</p> <p>The HIV-1 Western Blot assay is a reflex test that is performed when the HIV-1/2 Plus O EIA is repeatedly reactive.</p>
Possible Results	<p>Negative = no band present</p> <p>Positive = at least 2 of the major bands (gp160 and/or gp120, gp41, or p24) must be present</p> <p>Indeterminate = one or more bands are present but does not meet the criteria for a positive result</p>
Reference Range	Negative
Specimen Type	Serum
Specimen Container(s):	Red top tubes, Marble top tubes, polypropylene vials
Minimum volume accepted:	1 ml serum
Collection Instructions	<p>Blood should be collected in a plastic, sterile STD Program approved collection tube. Please follow the manufacturer's instructions on clot time requirements and centrifuge speed/ time requirements.</p> <p>Label specimen with Patient Name and a 2nd Unique Identifier such as a chart number or medical record number. DOB is not considered unique.</p> <p>Complete a STD/HIV Lab Form for each specimen or order test in StarLIMS. Lab submission form must be thoroughly completed with patient's first and last name, 2nd patient identifier, gender, date of birth, date and time of collection, specimen source, test requested, submitter's name, address, fax and contact</p>

	<p>number. Additional information regarding patients' address is requested.</p> <p>Transport specimen to laboratory as soon as possible after collection. Keep submission forms insulated from specimens.</p>
Storage and Transport Instructions	<p>Specimens can be shipped refrigerated (2-8°C) or ambient (8-37°C) and can be stored for up to 7 days.</p> <p>For longer storage, serum should be poured into a sterile screw cap tube and be frozen at -20°C or colder. Frozen specimens must be shipped on dry ice and received at a temperature of -20°C or colder. If a specimen is frozen, indicate the Date/Time specimen was frozen on the lab form or the LIMS manifest.</p>
Causes for Rejection	<p>Improper labeling, expired collection tubes , unspun samples, tubes that contain less than 90% of the total drawing capacity (QNS), specimen age >7 days if specimen has not been frozen at -20°C or colder. Improper storage and improper transport temperature are also reasons for rejection.</p>
Limitations of the Procedure	<p>Testing alone cannot be used to diagnose AIDS, which is a clinical syndrome. The diagnosis of AIDS must be established clinically. Indeterminate immunoblots should not be used as the sole basis of HIV-1 infection. Persons with an indeterminate immunoblot should be retested using a fresh specimen after six months. A negative immunoblot does not exclude the possibility of exposure to or infection with HIV-1. A person who has antibodies to HIV-1 is presumed to be infected with the virus, except that a person who has participated in an HIV vaccine study may develop antibodies to the vaccine and may or may not be infected with HIV. Clinical correlation is indicated with appropriate counseling, medical evaluation and possibly additional testing to decide whether a diagnosis of HIV infection is accurate.</p>
Interfering Substances	<p>No clinically significant effect has been detected in assay results of serum or plasma samples with increased levels of protein, lipids, bilirubin, or hemolysis, or after heat inactivation of patient samples.</p>
References	<p>BioRad Genetic Systems™ HIV-1/HIV-2 Plus O EIA Package Insert</p> <p>BioRad Genetic Systems™ HIV-1 Western Blot Package Insert</p>
Additional Information	<p>This is a reflex test that is automatically ordered on a sample when BioRad Genetic Systems™ HIV-1/HIV-2 Plus O EIA assay is reactive.</p>
Release Date	<p>10/25/2013</p>
<p>Warning: If you have printed a copy of this information please be advised that the Louisiana Office of Public Health Laboratories website and methods are updated on a regular basis. Please check the on-line version of this document to ensure you are relying on the most recent release.</p>	

